

WHAT IS CLAIMED IS:

1 1. For use in a telecommunications system having a source base station and a
2 destination base station where a specified mobile station establishes a connection with
3 the source base station, a method comprising:

4 determining a dynamic offset threshold for starting at least a portion of a soft
5 handover sequence for the specified mobile station at the destination base station, the
6 dynamic offset threshold being a function of a probability that the specified mobile
7 station will engage in soft handover;

8 initiating the at least a portion of the soft handover sequence when a signal
9 strength from the destination base station as received at the specified mobile station has
10 a predetermined relationship to the dynamic offset threshold.

1 2. The method of claim 1, further comprising initiating another portion of the
2 soft handover sequence when the signal strength from the destination base station as
3 received at the specified mobile station has a predetermined relationship to a fixed
4 offset threshold.

1 3. The method of claim 2, wherein the another portion of the soft handover
2 sequence is a remainder of the soft handover sequence.

1 4. The method of claim 1, wherein the probability is a function of signal
2 strength of the destination base station as received at the specified mobile station.

1 5. The method of claim 1, wherein the probability is a function of signal
2 strength of the destination base station as received at the specified mobile station and a
3 function of signal strength of the source base station as received at the specified mobile
4 station.

1 6. The method of claim 1, wherein the probability is a statistical probability
2 based on handover history of other mobile stations.

1 7. The method of claim 1, further comprising initiating the at least a portion of
2 the soft handover sequence when a signal strength from the destination base station as
3 received at the specified mobile station is not less than the dynamic offset threshold, the

dynamic offset threshold being a difference between the signal strength of the source base station as received at the specified mobile station and a dynamic offset.

8. The method of claim 7, wherein the dynamic offset is a function of a fixed offset and the probability of the specified mobile station fulfilling the handover criteria.

9. The method of claim 1, further comprising determining the dynamic offset threshold at a control node of the code division multiple access communication system.

10. The method of claim 9, further comprising the specified mobile station sending to the control node a measurement report of the signal strength of the destination base station as received at the specified mobile station.

11. A telecommunications system comprising:
a source base station;
a destination base station;
a dynamic offset threshold determination unit which determines a dynamic offset threshold for starting at least a portion of a soft handover sequence for the specified mobile station at the destination base station, the dynamic offset threshold being a function of a probability that the specified mobile station will engage in soft handover.

12. The apparatus of claim 11, wherein the dynamic offset threshold determination unit initiates the at least a portion of the soft handover sequence when a signal strength from the destination base station as received at the specified mobile station has a predetermined relationship to the dynamic offset threshold.

13. The apparatus of claim 11, further comprising a handover unit which initiates another portion of the soft handover sequence when the signal strength from the destination base station as received at the specified mobile station has a predetermined relationship to a fixed offset threshold.

14. The apparatus of claim 13, wherein the another portion of the soft handover sequence is a remainder of the soft handover sequence.

1 15. The apparatus of claim 11, wherein the probability is a function of signal
2 strength of the destination base station as received at the specified mobile station.

1 16. The apparatus of claim 11, wherein the probability is a function of signal
2 strength of the destination base station as received at the specified mobile station and a
3 function of signal strength of the source base station as received at the specified mobile
4 station.

1 17. The apparatus of claim 11, wherein the probability is a statistical
2 probability based on handover history of other mobile stations.

1 18. The apparatus of claim 11, wherein the dynamic offset threshold
2 determination unit initiates the at least a portion of the soft handover sequence when a
3 signal strength from the destination base station as received at the specified mobile
4 station is not less than the dynamic offset threshold, the dynamic offset threshold being
5 a difference between the signal strength of the source base station as received at the
6 specified mobile station and a dynamic offset.

1 19. The apparatus of claim 18, wherein the dynamic offset is a function of a
2 fixed offset and the probability of the specified mobile station fulfilling the handover
3 criteria.

1 20. The apparatus of claim 11, wherein the dynamic offset threshold
2 determination unit is situated at a control node of the code division multiple access
3 communication system.

1 21. The apparatus of claim 20, wherein control node receives from the specified
2 mobile station a measurement report of the signal strength of the destination base
3 station as received at the specified mobile station.